

Atty. Docket No.
1856-40401 (9948.0-02)Serial No.
10/706,880**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**
(Use several sheets if necessary)Applicant
Shuibo Xie et al.Filing Date
November 11, 2003

Group

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE |
|------------------|----|-----------------|------------|--------------------------|-------|-----------|----------------------------|
| <i>PW</i> | AA | 3752775 | 08/14/1973 | <i>Yamaguchi et al.</i> | 252 | 464 | |
| | AB | 4537873 | 08/27/1985 | <i>Kato et al.</i> | 502 | 242 | |
| | AC | 4585752 | 04/29/1986 | <i>Ernest</i> | 502 | 314 | |
| | AD | 4738946 | 04/19/1988 | <i>Yamashita et al.</i> | 502 | 303 | |
| | AE | 4793797 | 12/27/1988 | <i>Kato et al.</i> | 143 | 7 | |
| | AF | 4961786 | 10/09/1990 | <i>Novinson</i> | 106 | 692 | |
| | AG | 5837634 | 11/17/1998 | <i>McLaughlin et al.</i> | 501 | 127 | |
| ↓ | AH | 6399528 | 06/04/2002 | <i>Krell et al.</i> | 501 | 80 | 03/05/2001 |
| | AE | 2003/0032554 | 02/13/2003 | <i>Park et al.</i> | 502 | 302 | 05/13/2002 |
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FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | Translation YES NO |
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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EXAMINER *Pat Weller*

DATE CONSIDERED

1/30/06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP '609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.



for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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| Sheet | 2 | of | 4 | Attorney Docket Number | 1856-40401(9948.0-02) |
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|--|--------------------------|
| ✓ | AJ | Amato et al., <i>Sintering of Pelleted Catalysts for Automotive Emission Control</i> , pp. 187-197 | |
| ✓ | AK | Arai et al., <i>Recent Progress in High-Temperature Catalytic Combustion</i> , Catalysis Today, 10 (1991) pp. 81-94 | |
| ✓ | AL | Arai et al., <i>Thermal Stabilization of Catalyst Supports and their Application to High-Temperature Catalytic Combustion</i> , Applied Catalysis A: General 138 (1996) pp. 161-176 | |
| ✓ | AM | Artizzu-Duart et al, <i>Catalytic Combustion of Methane on Substituted Barium Hexaaluminates</i> , Catalysis Today 59 (2000) pp. 163-177 | |
| ✓ | AN | Beguin et al., <i>Stabilization of Alumina by Addition of Lanthanum</i> , Applied Catalysis 75 (1991) pp. 119-132 | |
| ✓ | AO | Bish et al., <i>Quantitative Phase Analysis Using the Rietveld Method</i> , J. Appl. Cryst. (1998) 21, pp. 86-91 | |
| ✓ | AP | Cai et al., <i>Atomic Scale Mechanism of the Transformation of γ-Alumina to α-Alumina</i> , Physical Review Letters, Vol. 89, No. 23, (12/02/2002) pp. 235501-1 – 235501-4 | |
| ✓ | AQ | Chen et al., <i>High Temperature Thermal Stabilization of Alumina Modified by Lanthanum Species</i> , Applied Catalysis A: General 205 (2001) pp. 159-172 | |
| ✓ | AR | Dexpert-Ghys, <i>Optical and Structural Investigation of the Lanthanum β-Alumina Phase Doped with Europium</i> , Journal of Solid State Chemistry 19, (1976) pp. 193-204 | |
| ✓ | AS | Farrington et al., <i>The Lanthanide β'' Alumina</i> , Applied Physics A 32 (1983) pp. 159-161 | |
| ✓ | AT | Groppi et al., <i>Preparation and Characterization of Hexaaluminate-Based Materials for Catalytic Combustion</i> , Applied Catalysis A: General, 104 (1993) pp. 101-108 | |
| ✓ | AU | Jang et al., <i>Catalytic Oxidation of Methane Over Hexaaluminates and Hexaaluminate-Supported Pd Catalysts</i> , Catalysis Today 47 (1999) pp. 103-113 | |
| ✓ | AV | Johansson et al., <i>Development of Hexaaluminate Catalysts for Combustion of Gasified Biomass in Gas Turbines</i> , Journal of Engineering for Gas Turbines and Power, Vol. 124 (04/2002) pp. 235-238 | |
| ✓ | AW | Kato et al., <i>Preparation of Lanthanum β-Alumina with High Surface Area by Coprecipitation</i> , Journal of the American Ceramic Society, 70 [7] (07/1987) pp. C-157-159 | |
| ✓ | AX | Levy et al., <i>The Effect of Foreign Ions on the Stability of Activated Alumina</i> , Journal of Catalysis 9 (1967) pp. 76-86 | |
| Examiner Signature | <i>Kulbaba</i> | | Dated Considered 1/30/06 |

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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| Application Number | 10/706,880 |
| Filing Date | November 12, 2003 |
| First Named Inventor | Shuibo Xie |
| Group Art Unit | |
| Examiner Name | |

Attorney Docket Number 1856-40401(9948.0-02)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|--|----------------|
| PN | AY | Liu et al., <i>Partial Oxidation of Methane over Nickel Catalysts Supported on Various Aluminas</i> , Korean Journal of Chemical Engineering 19 (5) pp. 735-741 (2002) | |
| | AZ | Liu et al., <i>Partial Oxidation of Methane over Ni/Ce-ZrO₃/0-Al₂O₃</i> , Korean Journal of Chemical Engineering 19(5) pp. 742-748 (2002) | |
| | BA | Machida et al., <i>Effect of Additives on the Surface Area of Oxide Supports for Catalytic Combustion</i> , Journal of Catalysts 103 (1987) pp. 385-393 | |
| | BB | Machida et al., <i>Analytical Electron Microscope Analysis of the Formation of BaO – 6Al₂O₃</i> , Journal of American Ceramic Society 71[12] pp. 1142-47 (1988) | |
| | BC | Machida et al., <i>Effect of Structural Modification on the Catalytic Property of Mn-Substituted Hexaaluminates</i> , Journal of Catalysis 123 (1990) pp. 477-785 | |
| | BD | Matsuda et al., <i>8th International Congress on Catalysis Volume IV: Impact of Surface Science on Catalysis Structure-Selectivity/Activity Correlations New Routes for Catalyst Synthesis</i> (pp. IV-879-889) | |
| | BE | Miao et al., <i>Partial Oxidation of Methane to Syngas over Nickel-Based Catalysts Modified by Alkali Metal Oxide and Rare Earth Metal Oxide</i> , Applied Catalysts A: General 154 (1997) pp. 17-27 | |
| | BF | Nair et al., <i>Pore Structure Evolution of Lanthana-Alumina Systems Prepared through Coprecipitation</i> , Journal of American Ceramic Society 83[8] (2000) pp. 1942-1946 | |
| | BG | Oudet et al., <i>Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO₃(Ln = La, Pr, Nd)</i> , Journal of Catalysis 114, (1998) pp. 112-120 | |
| | BH | Rahkeev et al., <i>Transition Metal Atoms on Different Alumina Phases: The Role of Subsurfaces Sites on Catalytic Activity</i> , Physical Review B 67, 115414 (2003) pg. 4 | |
| | BI | Rietveld, <i>A Profile Refinement Method for Nuclear and Magnetic Structures</i> , Journal of Appl. Cryst. (1969) 2, pp. 65-71 | |
| | BJ | Roh et al., <i>Partial Oxidation of Methane over Ni/0-Al₂O₃ Catalysts</i> , Chemistry Letters 2001 (pp. 666-667) | |
| | BK | Santos et al., <i>Standard Transition Aluminas, Electron Microscopy Studies</i> , Materials Research, Vol. 3 No. 4 (2000) pp. 104-114 | |
| | BL | Schaper et al., <i>The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports</i> , Applied Catalysis 7 (1983) pp. 211-220 | |
| | AM | Schaper et al., <i>Thermal Stabilization of High Surface Area Alumina</i> , Solid State Ionics 16 (1985) pp. 261-266 | |
| W | AN | Seo et al., <i>Experimental and Numerical Studies on Combustion Characteristics of a Catalytically Stabilized Combustor</i> , Catalysis Today 59 (2000) pp. 75-86 | |

Examiner Signature

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|--------------------|-----------------------|--|--------------------------|
| PH | BO | Russell et al., <i>Thermal Transformations of Aluminas and Alumina Hydrates</i> , Industrial and Engineering Chemistry Vol. 42, No. 7 (1950) pp. 1398-1403 | |
| | BP | Subramanian et al., <i>Characterization of Lanthana/Alumina Composite Oxides</i> , Journal of Molecular Catalysts, 69 (1991) pp. 235-245 | |
| | BQ | Taylor, <i>Computer Programs for Standardless Quantitative Analysis of Minerals Using the Full Powder Diffraction Profile</i> , Powder Diffraction, Vol. 6, No. 1 (1991) pp. 2-9 | |
| | BR | Tietz et al., <i>Investigations on Lanthanide-ion-exchanged β and β''-Alumina</i> , Journal of Alloys and Compounds, 192 (1993) pp. 78-80 | |
| | BS | Tijburg et al., <i>Application of Lanthanum to Psuedo-Boehmite and γ-Al_2O_3</i> , Chapman and Hall (1991) pp. 6479-6486 | |
| | BT | Weng et al., <i>Mechanistic Study of Partial Oxidation of Methane to Syngas Using In Situ Time-Resolved FTIR and Microprobe Raman Spectroscopies</i> , The Chemical Record Vol. 2, pp. 102-113 (2002) | |
| | BU | Wu et al., <i>Coupled Thermodynamic-Phase Diagram Assessment of the Rare Earth Oxide-Aluminium Oxide Binary Systems</i> , Journal of Alloys and Compounds, 179 (1992) pp. 259-287 | |
| ↓ | BV | Zhou et al., <i>Structures and Transformation Mechanisms of the n, γ and O Transition Aluminas</i> , International Union of Crystallography (1991) pp. 617-630 | |
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| Examiner Signature | <i>Paul Witten</i> | | Dated Considered 1/30/06 |

| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | | | | Atty. Docket No. 1856-36301 (9782.0-02) | Serial No. 10170688 10170688 | |
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| | | | | | Applicant Shuibo Xie et al. | | |
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| REFERENCE DESIGNATION U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE |
| <i>PW</i> | AA | 6,277,894 | 08/21/01 | Agee et al. | 518 | 700 | |
| <i>PW</i> | AB | 6,447,745 | 09/10/02 | Feeley et al. | 423 | 648.1 | |
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| OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| <i>PW</i> | AC | Search Report for Appln. No. PCT/US03/36055, dated 23/06/04 (2 p.) | | | | | |
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| EXAMINER | <i>Paul Witter</i> | | | DATE CONSIDERED | <i>1/30/06</i> | | |
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